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GAME AND FISH DEPARTMENT

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September 25, 2009

Mitch Ellis
Complex Manager
Southwest Arizona NWR Complex
9300 E. 28th Street
Yuma, AZ 85365

Re: Draft Environmental Assessment for Limiting Mountain Lion Predation on Desert Bighorn Sheep on the Kofa National Wildlife Refuge

Dear Mr. Ellis:

The Arizona Game and Fish Department (Department) has reviewed the U.S. Fish and Wildlife Service's (Service) Draft Environmental Assessment (Draft EA) for Limiting Mountain Lion Predation on Desert Bighorn Sheep on the Kofa National Wildlife Refuge (Refuge), which was released to the public through the Federal Register on August 4, 2009. Given the description of alternatives in the Draft EA, and our understanding and concern for the status of the desert bighorn sheep herd on the Refuge, the Department strongly supports Alternative B: the Proposed Action Alternative – Conduct Limited Removal of Mountain Lions (Proposed Action Alternative). The Department, as a cooperating agency, appreciates working closely with the Service in the development of the Draft EA and the alternatives presented therein, and we provide the following comments for your consideration.

Background and Project Description

As we understand, the purpose of the Draft EA and the Proposed Action Alternative is to assess and provide the Service with additional options for the management of the Kofa desert bighorn sheep population by allowing the Service to limit predation by mountain lions. This would include the removal of "offending" lions (defined as one that has killed 2 or more desert bighorn sheep within a 6-month period) by either lethal means or through translocation.

Surveys in 2006 resulted in an estimate of 390 desert bighorn sheep on the Refuge. The 2006 survey was the first time since 1980 that the population estimate was below 600 sheep and represents the sharpest drop recorded. Surveys in 2007 and 2008 (population estimates of 460 and 436 animals, respectively) suggest that the population of desert bighorn sheep on the Refuge remains at about half of the 20-year survey average.

Under the No Action Alternative, the Refuge would continue to be managed as it has been in the past, maintaining *status quo*. The Service currently has no Refuge-wide plan to guide the management of mountain lions. Current management efforts focus on the maintenance of critical wildlife water sources for bighorn sheep and, in annual coordination with the Department, monitoring desert bighorn sheep and mule deer numbers, setting the number of hunt permits, and considering desert bighorn sheep transplants to augment populations elsewhere in the region. Under this alternative, the Service would not take action to prevent the continued decline of the sheep population resulting from unmanaged predation by mountain lions within the Refuge boundaries.

Under the Proposed Action Alternative (Alternative B) – Conduct Limited Removal of Mountain Lions, the Service would be provided the option of removing specific individually-identified offending mountain lions, through translocation or lethal removal, from the Refuge under certain circumstances to recover and maintain an optimal population of desert bighorn sheep. The Proposed Action Alternative has several components:

1. When the Refuge bighorn sheep population estimate is below 600 animals, active mountain lion removal would occur, absent any significant mitigating circumstances.
2. When the Refuge bighorn sheep population estimate is at or above 800 animals, active mountain lion control would not occur, absent any significant mitigating circumstances.
3. When the Refuge bighorn sheep population estimate is between 600 and 800 animals, active mountain lion control may or may not be employed based on the totality of the circumstances at the time.
4. Translocation of offending mountain lions may be an option though it is not anticipated to be a viable option in most circumstances.
5. The Service and the Department would monitor the program by assessing impacts of removing mountain lions on the overall lion population and on the bighorn sheep population.

Under Alternative C – Indiscriminate Removal of Mountain Lions, there would be no attempts to radio collar and distinguish “offending” lions. Lions would be lethally removed or captured and translocated out of the area of the Kofa Mountains Complex (Kofa, New Water, South Plomosa, Tank, Little Horn, and Castle Dome Mountains). Efforts would be made to remove approximately 2 mountain lions per year from the area until the sheep population reached approximately 800 animals and exhibited an increasing trend based on at least 3 sheep population surveys.

Department Recommendations

Based on the description of the alternatives presented in the Draft EA and our knowledge and data of sheep and lion populations on the Refuge, the Department strongly recommends the Service select the Proposed Action Alternative. The scientific data collection and analyses conducted to date, has led the Department to believe that mountain lion predation is additive to other sources of mortality and sufficient to prevent the attainment of desert bighorn sheep population objectives on the Refuge. The option of lethally removing offending mountains lions

was identified in the *Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd* in April 2007, which was jointly produced by the Department and the Service.

The Proposed Action Alternative's limited removal of individual mountain lions, specifically identified as regularly preying on bighorn sheep, could help the currently-depressed Kofa bighorn sheep herd recover to levels necessary to: 1) ensure long-term population viability in the face of potential environmental and stochastic events such as drought, climate change, predation, disease, and additional human impacts; 2) resume translocations of sheep from the Refuge to support less robust populations across the state and throughout the southwest. These translocations are currently on hold due the recent decline in the Kofa population; 3) ensure the continued hunting of desert bighorn sheep on the Refuge, which results in hundreds of thousands of dollars and volunteer hours contributed toward sheep population and habitat conservation efforts, annually; and 4) reduce the likelihood and need to list the Kofa desert bighorn sheep population as a federally-protected threatened or endangered population in future. Without undertaking actions to address a known and quantifiable cause of mortality to the sheep herd, such as predation by mountain lions, it is likely that the Kofa sheep herd will continue to decline or have great difficulty recovering to historical population levels of approximately 600 – 800 animals on the Refuge.

The Department also recommends making the following changes to the Draft EA:

1. *Page 1 (1.1 Purpose of the Proposed Action)*

Draft EA – “The purpose of the proposed action is to provide the Service additional options for the management of the Kofa desert bighorn sheep population by allowing the Service to limit predation by mountain lions.”

Recommendation – “The purpose of the proposed action is to provide the Service additional options for the management of the Kofa desert bighorn sheep population by allowing the Service or its partner agencies to limit predation by mountain lions.”

Rationale – Although the Draft EA is intended to provide the Service with options for managing mountain lions and Kofa desert bighorn sheep on the Refuge, the document should clarify that many of the described actions could be conducted by other partner agencies, particularly the Department, in cooperation with the Service.

2. *Page 2 (1.3 Location)*

Draft EA – “The AGFD's predation management plan (the *Kofa Mountains Complex Predation Management Plan*) for non-Refuge lands is very similar to the proposed action in this document and AGFD has been implementing that plan on public lands surrounding the Refuge.”

Recommendation – “The AGFD's predation management plan (the *Kofa Mountains Complex Predation Management Plan*) covers AGFD actions on both Refuge and non-Refuge lands. However, the Department and Refuge coordinate and cooperate before activities related to this plan would take place on the Refuge. AGFD has been

implementing this plan on public lands surrounding the Refuge and their activities on non-Refuge lands are very similar to the proposed action in this document.”

Rationale – Although the Department has and will continue to coordinate with the Service prior to conducting predation management activities on the Refuge, the Department’s Kofa Mountains Complex Predation Management Plan was written to cover Department activities both on and off the Refuge.

3. *Page 8 (Figure 2. Refuge Bighorn Sheep Population Estimates, 1981-2008)*

Draft EA – The figure leaves a blank space for 1983 to indicate that no data was collected that year, but it does not leave spaces for other years like 1993, 1995, 1996, etc. when data was also not collected.

Recommendation – Use blank spaces on the graph to indicate years when no data was collected.

Rationale – The new format will be more consistent and accurately reflect data collection, and lack of, through the years.

4. *Page 9 (2.3 Mountain Lion Predation)*

Draft EA – “A fourth mountain lion (KM04) was collared on the Refuge in February 2009 and has since been found to have killed three bighorn sheep – one lamb, one ewe, and one ram.”

Recommendation – “A fourth mountain lion (KM04) was collared on the Refuge in February 2009 and was lethally removed by the Department on September 1, 2009. In 6 months this mountain lion had killed a total of 16 sheep, including 5 sheep on the Refuge.”

Rationale – The status of KMO4, other collared lions (KM01-03, RM01), and uncollared lions known to be occupying the Refuge (through cameras, DNA, sightings, etc.) needs to be updated here and throughout the document to accurately understand and identify the known and potential impacts on the Kofa sheep herd. These impacts include the predation on sheep from individual lions, as well as the combined and average predation rates and impacts on the sheep herd from all collared other known mountain lions occurring on the Refuge. Similar comments apply to Page 23 (4.5.4 Radio-collared Mountain Lions) and Page 32 (5.2.1 Impact on Mountain Lion Populations).

5. *Pages 13-14 (3.2 Alternative B: the Proposed Action Alternative – Conduct Limited Removal of Mountain Lions)*

Draft EA – Page 13 – “The proposed action is to allow the Service the option of removing specific individually identified offending mountain lions...” Page 14 – “The Service, or its agents, would carry out the lethal removal, or translocation, in the most efficient and humane way available to them.”

Mr. Mitch Ellis
September 25, 2009
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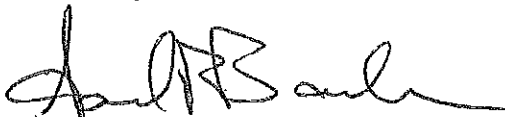
Recommendations – Page 13 – “The proposed action is to allow the Service or its partner agencies the option of removing specific individually identified offending mountain lions...” Page 14 – “The Service, its agents, or other partner agencies would carry out the lethal removal, or translocation, in the most efficient and humane way available to them.”

Rationale – Although the Draft EA is intended to provide the Service with options for managing mountain lions and Kofa desert bighorn sheep on the Refuge, the document should clarify that many of the described actions could be conducted by other partner agencies, particularly the Department, in cooperation with the Service. Additionally, the Department may carry out the lethal removal or translocation in coordination with the Service, but may or may not be acting as an agent of the Service.

The Department commends the Service for pursuing options to actively manage mountain lion predation affecting desert bighorn sheep on the Refuge. Although this issue has elicited public passions, the Department believes that taking an active role in managing mountain lion predation, as well as other potential impacts, is critical to recover the sheep population on the Refuge to its historical population levels of approximately 600 to 800 animals, especially given the already sharp population decline in recent years.

Thank you for the opportunity to review and comment on this Draft EA. The Department appreciates working with the Service in the development of the Draft EA and looks forward to continued cooperation in the management of desert bighorn sheep on the Refuge. If you have any questions or would like to discuss the content of this letter, please contact Troy Smith at 928-341-4068.

Sincerely,



Pat Barber
Supervisor
Region IV, Yuma

TGS:tgs

cc: Charles F. Ruerup, Environmental Science Division Chief, Yuma Proving Ground
Todd Shoaff, Field Manager, Bureau of Land Management
Laura Canaca, Project Evaluation Program Supervisor, Habitat Branch

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